

HANDBOOK OF PHONOLOGICAL DATA  
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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135 Songhai	135 Songhai	135 Songhai
135 01 p <sup>01</sup> (loan,limited)	*[z-hacek]	53 e <sup>11</sup> [e-mid] 11 17 (neutral,allo) */epsilon/
135 02 p-long <sup>01</sup> (loan,limited)	20 s-hacek <sup>05 61</sup> (allo,limited) */s/	55 e-mid-long <sup>12</sup>
135 03 b <sup>01</sup>	21 z-hacek <sup>05 61</sup> (allo,limited) */z/	56 epsilon <sup>11</sup> *[e-mid]
135 04 b-long	22 m	57 e-nasalized <sup>15</sup> (limited)
135 05 t <sup>02</sup>	23 m-long	58 a <sup>17</sup> [alpha-unrounded] 13
135 06 t-long	24 n	59 a-long <sup>13</sup>
135 07 t-palatalized [c] <sup>03</sup> (free)	25 n-long	60 a-nasalized <sup>15</sup> (limited)
135 08 d <sup>02</sup>	26 n-palatal	61 u
135 09 d-long	27 eng <sup>07</sup>	62 u-long
135 10 d-palatalized [j] <sup>03</sup> (free)	28 <sup>108</sup>	63 u-nasalized <sup>15</sup> (limited)
135 13 k <sup>04</sup> [k-unreleased] 60	29 l-long	64 o [o-open] 14
135 14 k-long	30 r <sup>08</sup>	65 o-long
135 15 g <sup>04</sup> [g-unreleased] 60	31 r-long	66 o-nasalized <sup>15</sup> (limited)
135 16 g-long	32 h <sup>09</sup>	67 yod
135 17 f <sup>05</sup>	51 i [iota] 10 (free)	68 yod-long
135 18 s *[s-hacek]	52 i-long	69 w [w-front] 62
135 19 z		
135 \$a Songhai \$b Gao \$d Nilo-Saharan \$e Mali \$f 400,000 \$g Merritt Ruhlen \$g Jim Lorentz (review) \$g John Crothers (editor)		
135 \$a Prost, R. P. A. \$b 1956 \$c La langue songay et ses dialectes \$f (Memoires de l'Institut francais d'Afrique noire, No.47) \$g Dakar: Institut francais d'Afrique noire		
135 \$a STRESS \$A "In two-syllable words the first syllable is usually both stressed and lengthened, but sometimes only stressed without lengthening. Sometimes both syllables are equally stressed. In words of two or more syllables, the syllable coming after two consonants is very weak; likewise for those which follow /eng/." (p.37)		
135 \$a SYLLABLE \$A (C)(C)V(:)(C) \$A "The only monosyllables consisting of a single vowel, or a vowel followed by a consonant, are pronouns." (p.34)\$A final C: /n, eng, r, yod, w/ \$A initial CC: nasal + homorganic occlusive		
135 01 \$A "/p/ is practically non-existent in Songhai.... No word begins with [p], except for three loanwords, and it should be noted that if a foreign word becomes widely used, then [p] changes into [f]." (p.26-27) "/b/ is found initially and word-medially. It is rare at the end of a word or syllable." (p.27) At the end of a word it has a tendency to change into [w] or [u]. (p.27)		
135 02 \$A "/t/ is found initially, rarely word-medially, (intervocalic [t] changes to [d] or even [r]), rarely word-finally, except in certain forms which are superlatives." (p.27) "/d/ is found initially, rarely word medially, and never word finally." (p.27) "Intervocalic [d] often becomes either /l/ or /r/." (p.31)		

- 135 03 \$A [t-palatalized, d-palatalized] are called "prepalatals" and "palatalized dentals." [c, j] are called "mediopalatals" and "palatalized palatals." The two sets are in free variation. In general they seem to derive from velars before front vowels (alternation with alveolars also occurs). However the palatals are also found before back vowels, and some examples of velars before mid front vowels also occur. (p.27f)
- 135 04 \$A "/k/ and /g/ are found initially and medially, and, in certain rare cases, unreleased word finally." (p.28) "The stops /k/ and /g/ are pronounced more or less back according to the following vowel, but equally, and in all cases, the articulation is further back than in the corresponding French articulations; without becoming, even before /o/ and /u/, the Arabic 'qof,' they nevertheless approach this sound." (p.28)
- 135 05 \$A Nonallophonic, palatoalveolar fricatives /s-hacek/, /z-hacek/ are only found "in some...rare words." "/f/ is found word initially and word medially." (p.27)
- 135 06 \$A "At the beginning of certain words a nasal consonant is found before a following stop. The nasal is homorganic with the following stop.... The nasal consonant is rather clear when the word is isolated or begins a sentence, very weak, or entirely lacking, when the word occurs in a sentence." (p.30)
- 135 07 \$A "/eng/ is rare as an isolated released consonant. It is found initially in some words.... Intervocally it exists in about a dozen words... On the other hand a final unreleased [eng] is frequent,...with the preceding vowel being nasalized." (p.28-29)
- 135 08 \$A "/l/ is found initially, word-medially and finally. Words ending in /l/ are moreover all foreign borrowings.... Initially there is often correspondence with /d/, several words allowing either /l/ or /d/." "/r/ is never found initially;...it is found medially and finally." Intervocalic and final /r/ and /l/ alternate with each other from dialect to dialect. /r/ is characterized phonetically only as a "dental liquid." (p.27)
- 135 09 \$A "/h/ is frequent in word initial position and does not occur elsewhere." (p.29)
- 135 10 \$A Unaccented /i/ varies with [iota] (= "very close [e].")
- 135 11 \$A While the author's description is ambiguous, it seems that [e-mid] does not contrast with [e] or [epsilon]. The latter two generally occur in word final position, and may be in contrast there (although there are not many examples given), and [e-mid] generally occurs in word internal position. [JHC]
- 135 12 \$A "The length of a vowel does not seem to influence the height of /e/; there are cases of /epsilon/ which are long." (p.21) (I only found examples of /e-mid-long/ in the text. [JHC])
- 135 13 \$A "There are two types of /a/, the first is a rather close [a] as in the French words 'cas, grave,' the other is an open [a] as in French 'papa.' The close [a] is the most frequent, even before /r/...; it seems as if the lengthening of the vowel causes it to become more close; the same phenomenon also occurs with the vowel /o/.... We do not distinguish the two a's in writing." (p.21) These are coded in the Archive as /a/ with allophone [alpha-unrounded]; no further conditioning factors (beyond length) are mentioned in the source.
- 135 14 \$A There are two types of 'o' which are apparently allophones of one phoneme, though the conditioning environment is not stated. (p.21) These are coded in the Archive as /o/ with allophone [o-open].
- 135 15 \$A "The nasal vowels occur in certain rather rare words." (p.21) The author distinguishes allophonic and phonemic nasalization: "Nasalization of a vowel results from its position before or after a nasal consonant, and even in the case of simple nasalization [i.e. phonemic nasalization--MRJ], it seems that it is due to the loss of a nasal consonant." (p.24)
- 135 16 \$A Vowel length functions both lexically and morphologically. (p.38)
- 135 17 \$A /a/ is palatalized to /e/ (i.e., [e-mid], cf. n.11) by a following /yod/ or preceding palatal stop (p.24), but the relationship is not allophonic, since /a/ does occur before /yod/. (Example, p.23)
- 135 60 \$A Velar stops are unreleased word finally.
- 135 61 \$A Alveolar fricatives /s/ and /z/ are realized as palatoalveolar before front vowels.
- 135 62 \$A /w/ is realized as [w-front] before /i/.